## 5. Recommended Improvement Projects

This chapter presents project recommendations for the City of Chula Vista's pedestrian network, including a focus on citywide and high priority improvement recommendations. These infrastructure improvements are intended to enhance pedestrian access and circulation as well as help pedestrians feel more comfortable when walking in Chula Vista. This chapter focuses primarily on engineering and infrastructure, while Chapter 7 discusses programs and other non-infrastructure improvements to enhance the walking environment in Chula Vista.

Two types of infrastructure projects are described on a citywide basis: infill of sidewalk gaps and curb ramp installation. Other citywide infrastructure improvements to enhance the pedestrian environment are also encouraged and discussed broadly in **Appendix B: Pedestrian Design Guidelines**.

Following the citywide project recommendations, thirty (30) of the highest priority project locations are identified and conceptual designs are presented for each project location in a "Project Sheet." The high-priority projects seek to improve specific intersections and corridors that were identified through the existing conditions review, extensive public input, and the pedestrian needs analysis.

All pedestrian projects and programs must be implemented through the City of Chula Vista's Capital Improvement Program process, which includes a public review process and project approval from the City Council.

## Citywide Improvements

## Infill of Sidewalk Gaps

Sidewalk gaps occur where there are no sidewalks, or where the sidewalk ends abruptly, resulting in a discontinuous pedestrian network. Areas without sidewalks may force pedestrians to walk along the edge of the roadway, or may cause pedestrians to cross at undesignated crossing locations. Providing a continuous pedestrian sidewalk along all of Chula Vista's roadways is recommended.

**Figure 5-1** displays locations of missing sidewalk in Chula Vista. There are approximately 59.4 miles of missing sidewalks in the City of Chula Vista, assuming both sides of the street should be equipped with sidewalk. The vast majority of the missing sidewalks are in the western half of Chula Vista, with a major concentration in the Southwest quadrant west of I-805 and south of L Street. Only 79.7 percent of the streets in the Southwest quadrant are equipped with sidewalks on both sides.

In 2006, the City adopted an Infrastructure Management Program to manage pavement, drainage, deficient cross gutters, utility undergrounding and missing infrastructure, including missing sidewalks, curbs and gutters, and pedestrian ramps. The City believes that expanding this program to include the City's complete array of public infrastructure would further improve the program's effectiveness.

Since 1983, the City has also had an Assessment District program used primarily in residential neighborhoods to improve streets, including filling in missing sidewalk. To create an assessment district, 60 percent of the affected property owners must agree to the formation of the district.

Decisions requiring financial commitments need approval of 50 percent of the property owners in the assessment district.

**RECOMMENDATION:** As a first priority, the City should continue to optimize the Infrastructure Management Program in order to fill sidewalk gaps across the City, especially located along arterial and connector roadways.

## **Curb Ramp Installation**

This section presents several types of improvements that will enable the City of Chula Vista to better accommodate disabled populations and comply with Federal and State legislation. These improvements include installation of missing curb ramps and truncated domes at all intersections across the city.

## Intersections without Curb Ramps

**Figure 5-2** displays locations of missing curb ramps in Chula Vista. There are a total of 877 missing curb ramps across the city on 386 different intersections. Of the 386 intersections without a curb ramp on at least one corner, 350 intersections are missing two or more curb ramps. A vast majority of the missing curb ramps 656 (75 percent) are located in the western half of Chula Vista.

The City of Chula Vista currently has an ADA Transition Plan, which documents and prioritizes every intersection with missing curb ramps for installation.

**RECOMMENDATIONS:** Chula Vista should continue their ADA Transition Plan schedule to install curb ramps at all intersections as feasible.

#### **Truncated Domes**

Truncated domes provide a cue to visually-impaired pedestrians that they are entering a street or intersection. Since 2002, ADA Guidelines (Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities, September 2002) have called for truncated domes on curb ramps. Most of Chula Vista's curb ramps lack truncated domes, because they were constructed prior to 2002. On streets that have

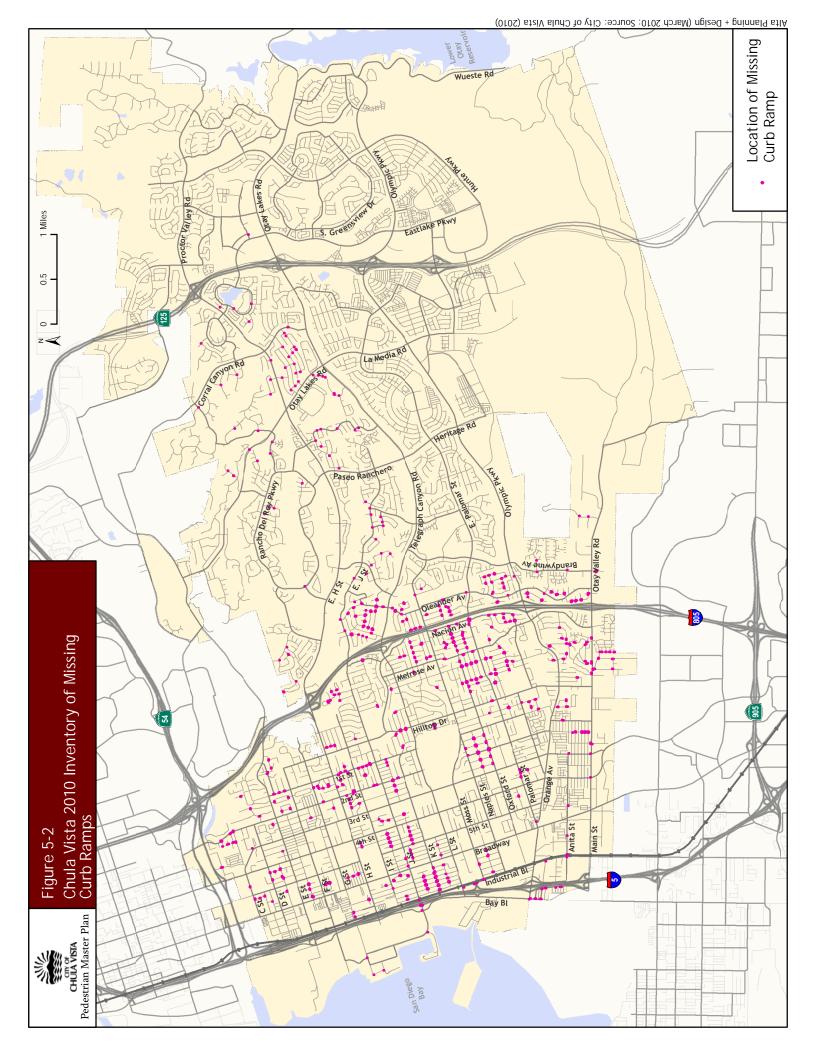


been constructed since 2002, truncated domes should be installed. Truncated dome panels shall be a minimum of 2' in the direction of ramp and the width shall be the full width of ramp, exluding ramp flares in the public right-of-way.

Although it is not required for Chula Vista to install truncated domes at existing curb ramps that were built prior to 2002, the City may wish to install these devices at all high priority intersection locations. Truncated domes are a very visible improvement, and they are relatively inexpensive to install. The preferred option for retrofitting truncated domes requires saw-cutting out a 3x4 space in the ramp in order to embed the truncated dome panel flush with the surface. While more expensive than simply adhering the retrofit panel to an existing ramp with epoxy, the saw-cutting ensures that the domes will not become detached and pose a tripping hazard.

**RECOMMENDATION:** Chula Vista should consider retrofitting truncated domes along arterial/arterial intersections where they are currently lacking.

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## **High Priority Improvement Projects**

## **Project Prioritization**

Pedestrian facilities were prioritized through a multi-part process which relied upon analysis of existing conditions, the pedestrian needs analysis presented in Chapter 4, and public input gathered from the outreach process. This extensive data, cataloged in spatial format, was used to develop a GIS-based prioritization system that assigns priority scores to every roadway and intersection in the City. **Table 5.1** displays the prioritization inputs and scoring system. The points assigned to each of the inputs were extensively discussed by Project Working Group members before being finalized. **Figures 5.3** and **5.4** display the outcome of the prioritization analysis for roadway segments and intersections, respectively.

After the prioritization analysis was complete, the highest ranking segments were assembled together into 30 project areas. The high priority project areas are largely located along arterial and collector roadways that form the backbone of the City's transportation system. There is considerably greater need for projects in the older western half of the City. Only three high priority project areas were considered for eastern Chula Vista.

**Figure 5-5** displays the high priority corridors and intersections, along with each facility's ranking. **Table 5-2** lists the thirty (30) high priority projects along with their respective rankings and prioritization scores. For a list of project types and cost estimates, refer to Table 8.3.

## High Priority Project Descriptions and Costs

The final component of Chapter 5 is the presentation of the 30 high priority project sheets. The high priority project sheets include a description of the project area and issues; a listing of the specific improvement recommendations; a cost estimate; an overview map of the project area; and finally, conceptual designs of each of the pedestrian improvement recommendations. It should be noted that the City of Chula Vista has several Capital Improvement Projects pending, including the following projects:

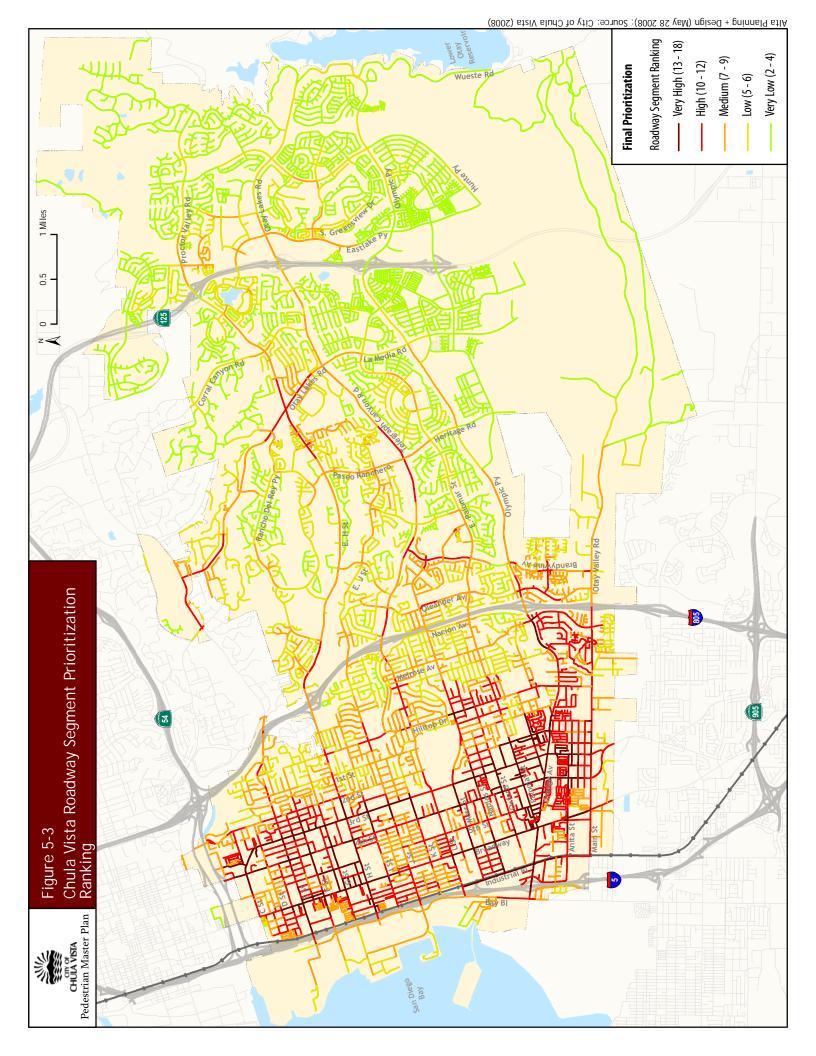
- Third Avenue, between E and H Streets;
- Fourth Avenue, between L Street and Orange Avenue;
- Oxford Street, between Third and Alpine Avenues;
- Otay Lakes Road, between Canyon Drive to south of East H Street.

The Otay Lakes Road project will eliminate the east-west crossing at the south leg of the intersection at East H Street.

Table 5.1
Roadway Segment and Intersection Ranking System

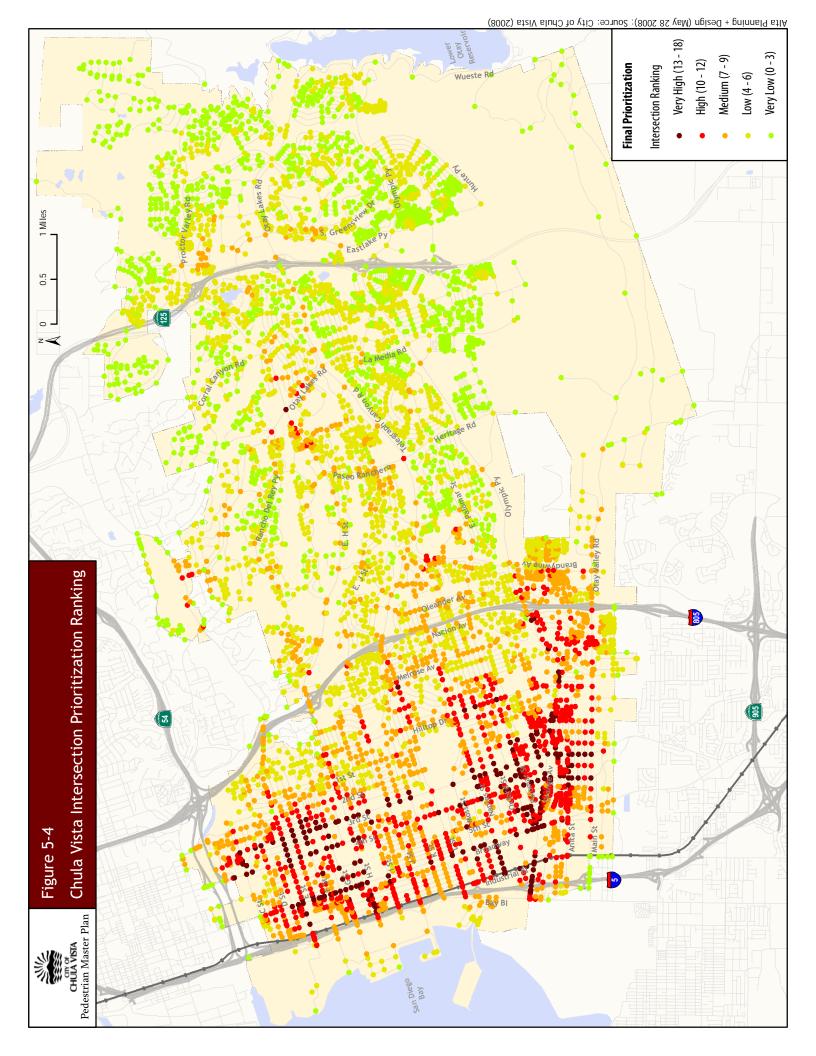
Roadway Segment and Intersection Ranking System  Factor	Points
Pedestrian Demand Model	
Very High	4
High	3
Moderate	2
Low	1
Pedestrian Detractor Model (Detractor Scores)	
Very High	5
High	4
Moderate	3
Low	2
Very Low	1
Public Comment	
Public comments regarding roadway segment (4 to 10 comments per segment) or	2
Public comments regarding roadway segment (1 to 3 comments per segment) or	1
No public comment regarding roadway segment or intersection	0
Proximity to Schools, Parks, and Libraries	
< 1/4 Mile	2
1/4 to 1/2 Mile	1
> ½ Mile	0
Proximity to Mobile Home Parks	
< 1/4 Mile	2
1/4 to 1/2 Mile	1
> ½ Mile	0
Proximity Senior Activity Centers & Housing	
< 1/4 Mile	2
1/4 to 1/2	1
> ½ Mile	0
Infrastructure Deficiency Cost by School Area	
> \$178 per foot of roadway	4
\$85 - \$177 per foot of roadway	3
\$70 - \$84 per foot of roadway	2
\$20 - \$69 per foot of roadway	1
< \$20 per foot of roadway	0

Source: Alta Planning + Design, 12/18/2009



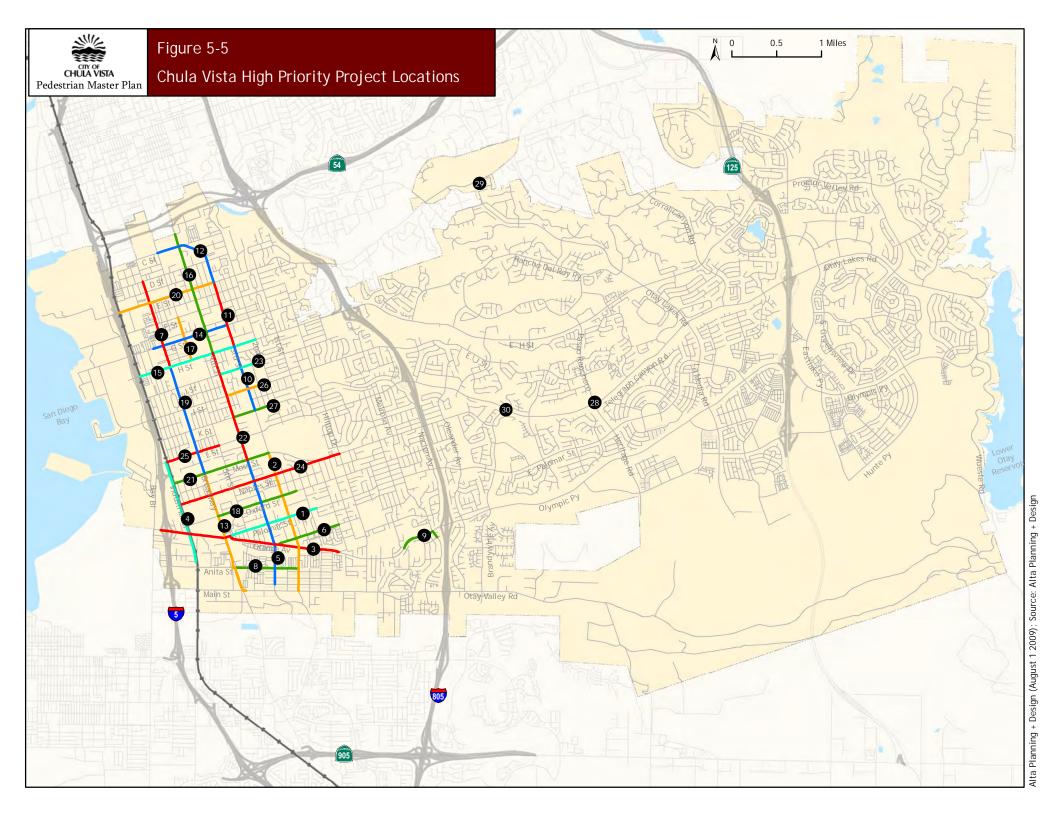
## [RECOMMENDED IMPROVEMENT PROJECTS]

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## [RECOMMENDED IMPROVEMENT PROJECTS]

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## [RECOMMENDED IMPROVEMENT PROJECTS]

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Table 5.2
Chula Vista Pedestrian Master Plan High Priority Project Areas

High-Priority Corridors	Rank	Projec	t Area Location		Туре	Quadrant	Points
Palomar Street		High-Priority Corridors					
Palomar Street				То			
3	1	ů .	Orange Avenue	Second Avenue	Corridor	SW	16.59
Industrial Boulevard	2	Third Avenue	Moss Street	Main Street	Corridor	SW	15.65
Fourth Avenue	3	Orange Avenue	Palomar Street	Second Avenue	Corridor	SW	15.60
1	4	Industrial Boulevard	L Street	Anita Street	Corridor	SW	15.29
7         Broadway         D Street         H Street         Corridor         NW         13,96           8         Anita Street         Broadway         Third Avenue         Corridor         SW         13,90           9         East Orange Avenue         Max Avenue         Interstate 805         Corridor         SW         13,89           10         Third Avenue         H Street         K Street         Corridor         NW         13,88           11         Third Avenue         E Street         H Street         Corridor         NW         13,76           12         C Street/Third Avenue Extension/Third Avenue         Fifth Avenue         E Street         Corridor         NW         13,76           12         C Street Street         Broadway         Moss Street         Corridor         NW         13,76           13         Broadway         Moss Street         Main Street         Corridor         NW         13,78           14         G Street         Broadway         Third Avenue         Corridor         NW         13,49           15         H Street         Interstate 5         Second Avenue         Corridor         NW         13,33           16         Fourth Avenue         F Street <td>5</td> <td>Fourth Avenue</td> <td>Moss Street</td> <td>Main Street</td> <td>Corridor</td> <td>SW</td> <td>14.48</td>	5	Fourth Avenue	Moss Street	Main Street	Corridor	SW	14.48
8         Anita Street         Broadway         Third Avenue         Corridor         SW         13.90           9         East Orange Avenue         Max Avenue         Interstate 805         Corridor         SW         13.89           10         Third Avenue         H Street         K Street         Corridor         NW         13.88           11         Third Avenue         E Street         H Street         Corridor         NW         13.76           12         C Street/Third Avenue Extension/Third Avenue         F ifth Avenue         E Street         Corridor         NW         13.72           13         Broadway         Moss Street         Main Street         Corridor         NW         13.63           14         G Street         Broadway         Third Avenue         Corridor         NW         13.63           15         H Street         Interstate 5         Second Avenue         Corridor         NW         13.33           16         Fourth Avenue         State Route 54         H Street         Corridor         NW         13.20           17         Fifth Avenue         F Street         H Street         Corridor         NW         13.19           18         Oxford Street         Broad	6	Quintard Street	Orange Avenue	1st Avenue	Corridor	SW	14.04
Seast Orange Avenue	7	Broadway	D Street	H Street	Corridor	NW	13.96
Third Avenue	8	Anita Street	Broadway	Third Avenue	Corridor	SW	13.90
Third Avenue	9	East Orange Avenue	Max Avenue	Interstate 805	Corridor	SW	13.89
C Street/Third Avenue Extension/Third Avenue   Fifth Avenue   E Street   Corridor   NW   13.72	10	Third Avenue	H Street	K Street	Corridor	NW	13.88
Broadway   Moss Street   Main Street   Corridor   SW   13.63	11	Third Avenue	E Street	H Street	Corridor	NW	13.76
Third Avenue   Corridor   NW   13.49	12	C Street/Third Avenue Extension/Third Avenue	Fifth Avenue	E Street	Corridor	NW	13.72
15         H Street         Interstate 5         Second Avenue         Corridor         NW         13.33           16         Fourth Avenue         State Route 54         H Street         Corridor         NW         13.20           17         Fifth Avenue         F Street         H Street         Corridor         NW         13.19           18         Oxford Street         Broadway         Second Avenue         Corridor         SW         13.09           19         Broadway         H Street         Moss Street         Corridor         NW/SW         12.80           20         E Street         Interstate 5         Third Avenue         Corridor         NW         12.75           21         Moss Street         Industrial Boulevard         Third Avenue         Corridor         SW         12.38           22         Fourth Avenue         H Street         Moss Street         Corridor         NW/SW         12.24           23         I Street         Fourth Avenue         Second Avenue         Corridor         NW         12.24           24         Naples Street         Industrial Boulevard         Hilltop Drive         Corridor         SW         12.24           25         L Street         Industr	13	Broadway	Moss Street	Main Street	Corridor	SW	13.63
Fourth Avenue   State Route 54   H Street   Corridor   NW   13.20	14	G Street	Broadway	Third Avenue	Corridor	NW	13.49
17Fifth AvenueF StreetH StreetCorridorNW13.1918Oxford StreetBroadwaySecond AvenueCorridorSW13.0919BroadwayH StreetMoss StreetCorridorNW/SW12.8020E StreetInterstate 5Third AvenueCorridorNW12.7521Moss StreetIndustrial BoulevardThird AvenueCorridorSW12.3822Fourth AvenueH StreetMoss StreetCorridorNW/SW12.2423I StreetFourth AvenueSecond AvenueCorridorNW12.2424Naples StreetIndustrial BoulevardHilltop DriveCorridorSW12.2425L StreetIndustrial BoulevardFifth AvenueCorridorSW11.9126J StreetFourth AvenueSecond AvenueCorridorNW11.2427K StreetFourth AvenueSecond AvenueCorridorNW10.76High-Priority Intersections28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10	15	H Street	Interstate 5	Second Avenue	Corridor	NW	13.33
18Oxford StreetBroadwaySecond AvenueCorridorSW13.0919BroadwayH StreetMoss StreetCorridorNW/SW12.8020E StreetInterstate 5Third AvenueCorridorNW12.7521Moss StreetCorridorSW12.3822Fourth AvenueH StreetMoss StreetCorridorNW/SW12.2423I StreetFourth AvenueSecond AvenueCorridorNW12.2424Naples StreetIndustrial BoulevardHilltop DriveCorridorSW12.2425L StreetIndustrial BoulevardFifth AvenueCorridorSW11.9126J StreetFourth AvenueSecond AvenueCorridorNW11.2427K StreetFourth AvenueSecond AvenueCorridorNW10.76High-Priority Intersections28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10	16	Fourth Avenue	State Route 54	H Street	Corridor	NW	13.20
Broadway	17	Fifth Avenue	F Street	H Street	Corridor	NW	13.19
E Street Interstate 5 Third Avenue Corridor NW 12.75  21 Moss Street Industrial Boulevard Third Avenue Corridor SW 12.38  22 Fourth Avenue H Street Moss Street Corridor NW/SW 12.24  23 I Street Fourth Avenue Second Avenue Corridor NW 12.24  24 Naples Street Industrial Boulevard Hilltop Drive Corridor SW 12.24  25 L Street Industrial Boulevard Fifth Avenue Corridor SW 11.91  26 J Street Fourth Avenue Second Avenue Corridor NW 11.24  27 K Street Fourth Avenue Second Avenue Corridor NW 11.24  28 Paseo Ranchero/Heritage Road and Telegraph Canyon Road Intersection E 10  Otay Lakes Road and Bonita Road	18	Oxford Street	Broadway	Second Avenue	Corridor	SW	13.09
Moss Street   Industrial Boulevard   Third Avenue   Corridor   SW   12.38	19	Broadway	H Street	Moss Street	Corridor	NW/SW	12.80
22Fourth AvenueH StreetMoss StreetCorridorNW/SW12.2423I StreetFourth AvenueSecond AvenueCorridorNW12.2424Naples StreetIndustrial BoulevardHilltop DriveCorridorSW12.2425L StreetIndustrial BoulevardFifth AvenueCorridorSW11.9126J StreetFourth AvenueSecond AvenueCorridorNW11.2427K StreetFourth AvenueSecond AvenueCorridorNW10.76High-Priority Intersections28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10	20	E Street	Interstate 5	Third Avenue	Corridor	NW	12.75
1 Street   Fourth Avenue   Second Avenue   Corridor   NW   12.24     24 Naples Street   Industrial Boulevard   Hilltop Drive   Corridor   SW   12.24     25 L Street   Industrial Boulevard   Fifth Avenue   Corridor   SW   11.91     26 J Street   Fourth Avenue   Second Avenue   Corridor   NW   11.24     27 K Street   Fourth Avenue   Second Avenue   Corridor   NW   10.76	21	Moss Street	Industrial Boulevard	Third Avenue	Corridor	SW	12.38
24Naples StreetIndustrial BoulevardHilltop DriveCorridorSW12.2425L StreetIndustrial BoulevardFifth AvenueCorridorSW11.9126J StreetFourth AvenueSecond AvenueCorridorNW11.2427K StreetFourth AvenueSecond AvenueCorridorNW10.76High-Priority Intersections28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10	22	Fourth Avenue	H Street	Moss Street	Corridor	NW/SW	12.24
25L StreetIndustrial BoulevardFifth AvenueCorridorSW11.9126J StreetFourth AvenueSecond AvenueCorridorNW11.2427K StreetFourth AvenueSecond AvenueCorridorNW10.76High-Priority Intersections28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10	23	I Street	Fourth Avenue	Second Avenue	Corridor	NW	12.24
26J StreetFourth AvenueSecond AvenueCorridorNW11.2427K StreetFourth AvenueSecond AvenueCorridorNW10.76High-Priority Intersections28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10	24	Naples Street	Industrial Boulevard	Hilltop Drive	Corridor	SW	12.24
27     K Street     Fourth Avenue     Second Avenue     Corridor     NW     10.76       High-Priority Intersections       28     Paseo Ranchero/Heritage Road and Telegraph Canyon Road     Intersection     E     11       29     Otay Lakes Road and Bonita Road     Intersection     E     10	25	L Street	Industrial Boulevard	Fifth Avenue	Corridor	SW	11.91
High-Priority Intersections       28 Paseo Ranchero/Heritage Road and Telegraph Canyon Road     Intersection     E     11       29 Otay Lakes Road and Bonita Road     Intersection     E     10	26	J Street	Fourth Avenue	Second Avenue	Corridor	NW	11.24
28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10	27	K Street	Fourth Avenue	Second Avenue	Corridor	NW	10.76
28Paseo Ranchero/Heritage Road and Telegraph Canyon RoadIntersectionE1129Otay Lakes Road and Bonita RoadIntersectionE10		Hiah-Pri	ority Intersections				
29 Otay Lakes Road and Bonita Road Intersection E 10	28				Intersection	E	11
·	29						10
	30	•			Intersection	E	10

Note: Corridor priority scores are rounded to the nearest hundredth. Corridors are listed in order according to their actual priority scores.

Source: Alta Planning + Design, March 2010

## Project 1: Palomar Street Corridor: Orange Avenue to Second Avenue

#### Description of Area and Issues

# This 0.94 mile high priority project along Palomar Street is lined with a mixture of medium and low density residential land uses. The corridor is four lanes with a wide painted median. There is one intersection along this corridor, a three-legged intersection at Orange Avenue, with an unusual geometry. The segment has moderate daily traffic volumes. The posted speed limits range between 30 and 35 mph. The area is additionally challenging for pedestrians due to the sporadic sidewalk gaps at the western end of the project area. This high priority project ranked 1st out of a total of 30 high priority projects, scoring 16.59 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Install sidewalk along all segments of the corridor where sidewalk is missing (Project Missing Sidewalk).
- Install ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp) and where sidewalk improvements are recommended.
- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational
  purposes only.
- Orange Avenue/Palomar Street: widen sidewalk on the north side of the intersection; extend curb on the northeast corner; convert separate
  through and right turn lanes at the northbound Orange Avenue approach to this intersection to a shared through-right turn lane; install new
  sidewalk, perpendicular curb ramps and reduce turning radius at the southeast corner of the intersection; realign crosswalk on the south leg of
  the intersection, and install a new crosswalk on the east leg.
- Second Avenue/Palomar Street: extend curb and add new curb ramps on the northwest and northeast corner; install standard crosswalks on all four legs of the intersection; setback stop limit lines at all four approaches to the intersection.

Cost Estimate: \$342,260

#### Project Extent



Orange Avenue/Palomar Street Improvements









PEDESTRIAN MASTER PLAN 116 June 15, 2010

## Project 2 (sheet 1 of 2): Third Avenue Corridor: Moss Street to Orange Avenue

#### Description of Area and Issues

This 1.1 mile segment of high priority project along Third Avenue begins at the southwest corner of the San Diego Golf Course, and traverses retail as well as commercial areas, and community destinations, such as the MAAC Community Charter School. The corridor is served by the regional MTS bus route 929 and has moderate transit ridership rates all along the corridor. The area includes multiple large intersections with multiple turn lanes. The project has high average daily traffic volumes and posted speed limits are 35 mph. The segment displayed on this sheet 1 of 2, is a portion of the high priority project ranked  $2^{\rm nd}$  out of a total 18.0 priority projects, scoring 15.65 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- . Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- . Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- Third Avenue/Moss Street: extend curb and widen sidewalk on the northwest, northeast, and southwest corners; install crosswalks and stop line bars at all intersection legs; install a choker on the southeast leg; and restripe lanes along the Moss Street intersection approach.
- Third Avenue/Naples Street: extend curbs on the northwest and southwest corner; widen sidewalks on the northeast leg; shorten raised median on the south leg; convert
  the separate through and right-turn lanes on both legs of Naples Street to shared though-right turn lanes; and install standard crosswalks with advance stop line bars at all
  intersection legs.
- Third Avenue/Oxford Street: extend curbs and widen sidewalks on the northeast, southeast and southwest intersection legs; convert the separate through and right-turn lanes on the westbound Oxford Street approach to a shared though-right turn lane; and install standard crosswalks and advance stop line bars at all intersection legs.
- Third Avenue / Palomar Street: install standard crosswalks and advance stop line bars at all intersection legs; extend curbs into Third Avenue on the southwest and southeast legs; widen sidewalks on the southeast leg; and extend the median to the stop line bar on the south leg of the intersection.

Cost Estimate: \$567,485

#### **Project Extent**



Third Avenue/Moss Street Improvements

Third Avenue/Naples Street Improvements

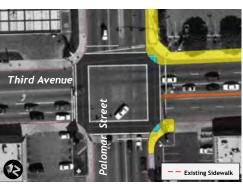
Third Avenue/Oxford Street Improvements

Third Avenue/Palomar Street Improvements









## Project 2 (sheet 2 of 2): Third Avenue Corridor: Orange Avenue to Main Street

#### Description of Area and Issues

This 0.49 mile segment of high priority project along Third Avenue traverses residential and mixed residential-commercial areas. The corridor is served by the regional MTS bus route 929 and demonstrates moderately high transit ridership rates. The area includes multiple large and complex intersections with multiple turn lanes, such as the Third Avenue/Orange Avenue intersection and Third Avenue/Main Street intersection. The segment has moderate to high average daily traffic volumes and posted speed limits are 35 mph on Third Avenue between Orange Avenue and Main Street. The combination of significant vehicular traffic and large intersections create potential conflicts between pedestrians and vehicles. The area is additionally challenging for pedestrians because it lacks sidewalk for long segments of the project area. The segment displayed on this sheet 2 of 2 is a portion of the high priority project ranked 2nd out of a total of 30 high priority projects, scoring 15.65 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- · Install sidewalk along all segments of the corridor where sidewalk is missing (Project Missing Sidewalk).
- Install ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp) and where sidewalk improvements are recommended
- Non-project missing sidewalk is outside of the scope of this project and is displayed for informational purposes only.
- Third Avenue/Orange Avenue: widen sidewalks on the east side of Third Avenue north of the intersection; extend the curb on the northeast
  corner; install a channelized right-turn lane with landscaped pedestrian island on the northwest corner; realign the crosswalk on the north, west,
  and east intersection legs; and install ladder crosswalks with advance stop line bars.
- Third Avenue/Tremont Street: extend the curb on the northwest corner; install standard crosswalks on the west and east intersection legs; and install median in the north intersection leg.
- Third Avenue/Main Street: install a pedestrian island on the northwest corner to provide a pedestrian refuge and shorten crossing distances; install raised medians on the west and east legs of Main Street; install ladder crosswalks on all intersection legs, including between the pedestrian island and curb on the northwest corner.

Cost Estimate: \$553,691

#### Project Extent



Third Avenue/Orange Avenue Improvements

(1)



Third Avenue/Tremont Street Improvements

(1)



Third Avenue/Main Street Improvements



## Project 3 (1 of 2): Orange Avenue / Palomar Street Corridor: Palomar Street (Bay Boulevard to Orange Avenue)

#### Description of Area and Issues

#### Improvement Recommendations and Cost Estimate

This 0.86 mile segment of high priority project along Palomar Street begins in a predominately industrial area and extends into a community shopping area. From Bay Boulevard to Broadway average traffic volumes exceed 30,000 vehicles per day. The posted speed limit along this project segment is 35 mph. The segment also intersects 1-5, which serves as a barrier to pedestrian travel. Several pedestrian crashes occurred between 2002 and 2007 along this project segment and it received several public comments regarding safety concerns via the Pedestrian Master Plan survey. The segment includes the San Diego Trolley Palomar Street Station and is served by the local Chula Vista bus route 701, which explains the high daily transit ridership rates recorded at the Industrial Boulevard/Orange Avenue intersection. The project segment overlaps with the Palomar Gateway Community Transit Area Project, which is a fully-funded and partially constructed project. The Palomar Gateway Project includes plans to install landscaping on both sides of Palomar Street between 1-5 and Industrial Boulevard. Enhanced concrete paver crosswalks were installed at the Industrial Boulevard/Palomar Street intersection as a part of the Palomar Gateway Project. This segment is a portion of a high priority project that scored 15.6 out of a total 18.0 priority points and is ranked 3rd out of a total of 30 high priority projects.

- · Install sidewalk along the segment of the corridor where sidewalk is missing (Project Missing Sidewalk).
- Install ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp) and where sidewalk improvements are recommended. Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes
- . I-5 SB Ramp/Palomar Street: install standard crosswalks on west and south intersection legs; and install an advance stop line bar on the west leg.
- Murrel Drive (Private)/Palomar Street: install standard crosswalks on all legs of the intersection; install advance stop line bars on the west and east legs; and install a new curb ramp on northeast corner of this intersection.
- Private Drive/Palomar Street: install standard crosswalks on the west, south, and east intersection legs; install advance stop line bars on the west and east legs; and install a new curb ramp on the northeast corner of this intersection.
- Cost Estimate: \$118,108

#### Project Extent

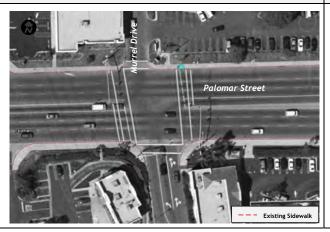


#### I-5/Palomar Street Improvements

#### Murrel Drive (Private)/Palomar Street Improvements

#### Private Drive/Palomar Street Improvements







## Project 3 (2 of 2): Orange Avenue / Palomar Corridor: Orange Avenue (Palomar Street to Second Avenue)

#### Description of Area and Issues

This approximately one mile segment of high priority project traverses residential areas and areas with a mix of residential, commercial, and public land uses at the far eastern end of the segment. The area includes multiple large and complex intersections with multiple turn lanes, such as the Fourth Avenue/Orange Avenue intersection and Third Avenue/Orange Avenue intersection. The segment has moderate average daily traffic volumes and posted speed limits are 40 mph on Orange Avenue between Palomar Street and Second Avenue. The project area includes segments of missing sidewalk and intersects multiple roadways with missing sidewalk. This corridor also received several public comments regarding safety concerns via the Pedestrian Master Plan survey. According to the 2000 US Census there is a relatively high percentage of residents living around this corridor who commute to work as pedestrians. This segment is a portion of the high priority project that ranked 3rd out of a total of 30 high priority projects, scoring 15.6 out of a total of 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Install sidewalk along all segments of the corridor where sidewalk is missing (Project Missing Sidewalk).
- Install ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp) and where sidewalk improvements are recommended.
- · Non-project missing sidewalk is outside of the scope of this project and is displayed for informational purposes only.
- Orange Avenue: reduce the Orange Avenue cross-section between Palomar Street and Fourth Avenue, from 4-lanes to 2-lanes with bike lanes and a landscaped parkway.
- Fourth Avenue/Orange Avenue: extend curbs into Orange Avenue on the northwest and southeast corners; extend curb into Fourth Avenue
  on the northwest corner; install standard crosswalks with advance stop line bars on all legs; extend median along the south leg; and restripe lanes
  at the south less.
- Second Avenue/Orange Avenue: install standard crosswalks on the west, north, and east intersection legs; install advance stop lines on the
  west and east legs.
- Cost Estimate: \$349,025

#### Project Extent



0

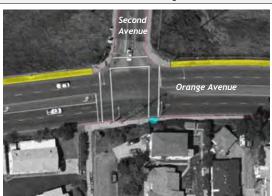
#### Fourth Avenue/Orange Avenue



A

Existing Sidewalk
Raised Median

## Second Avenue/Orange Avenue



--- Existing Sidewalk

## Project 4: Industrial Boulevard Corridor: L Street to Anita Street

#### **Description of Area and Issues**

This 1.22 mile high priority project along Industrial Boulevard parallels the MTS San Diego Trolley line that runs along the western border of Chula Vista's urbanized western neighborhoods. The Palomar Trolley Center, located south of the Industrial Boulevard/Palomar Road intersection, serves as a major pedestrian trip attractor. There are several other pedestrian attracting land uses nearby, including Harborside Elementary School and Harborside Park. The corridor is characterized by a diverse mix of land uses, including mobile homes, retail and industrial. This corridor is highly problematic for pedestrians due to the lack of sidewalks along the majority of the corridor, numerous driveways on the west side due to the industry and commercial uses, and its intersection with I-5 NB ramps and Palomar Street, a high volume roadway. The City has fully funded construction plans to make drainage and pavement improvements, install curb/gutter, sidewalk, and curb ramps on the east side of Industrial Boulevard between Palomar Street to Naples Street and Naples Street and to install Class II bike lanes on both sides of Industrial Boulevard between Palomar Street to Naples Street. This high priority project does not factor in the costs of these already funded improvements. This high priority projects, scoring 15.29 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Install sidewalk along all segments of the corridor where sidewalk is missing or unfunded (Project Missing Sidewalk) and ADA compliant curb
  ramps at all intersections where missing or unfunded (Project Missing Curb Ramp).
- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.

Cost Estimate: \$701,135

#### Project Extent



## Project 5: Fourth Avenue Corridor: Moss Street to Main Street

#### Description of Area and Issues

This 1.5 mile high priority project along Fourth Avenue is predominately residential with a significant portion of multifamily residential. Several schools are located along this corridor, including Del Rey High School, Lauderbach Elementary School, and Montgomery Elementary School. The corridor intersects three other high priority project corridors. The City plans to install sidewalk along the west side of Fourth Avenue from L Street to Orange Avenue, curb ramps along this segment, and driveway aprons. This is a fully funded project and therefore the costs of these treatments are not included in this project cost estimate. The area is particularly challenging for pedestrians because it lacks sidewalk for long segments of the project area and intersects multiple roadways that lack sidewalks. The segment has moderate average daily traffic volumes and posted speed limits are 35 mph. Several crashes have been reported at multiple intersections along the corridor between 2002 and 2007. These safety issues combined with the presence of schools and homes makes this is a high priority for pedestrian improvements. This high priority project scored 14.48 out of a total 18.0 priority points and ranks 6th out of a total of 30 high priority projects.

#### Improvement Recommendations and Cost Estimate

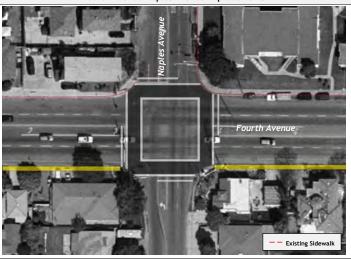
- Install sidewalk along all segments of the corridor where sidewalk is missing (Project Missing Sidewalk).
- Install ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp) and where sidewalk improvements are recommended.
- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- Fourth Avenue/ Anita Street: extend curbs on all four corners and install high visibility ladder crosswalks with advance stop lines on all legs
  of this intersection.

Cost Estimate: \$97,895

#### Project Extent



#### Fourth Avenue/Naples Avenue Improvements



#### Fourth Avenue/Oxford Street Improvements





## Project 6: Quintard Street Corridor: Orange Avenue to First Avenue

#### Description of Area and Issues

This 0.7 mile high priority project area along Quintard Street is primarily residential with commercial activities concentrated around the Third Avenue/Quintard Street intersection and near Castle Park Middle School located on Quintard Street between Third and Second Avenues. The corridor is a two-lane roadway with on-street parallel parking along the majority of the corridor and angled parking in front of the middle school. The southern side of Quintard Street between Third and Second Avenues lacks sidewalk, which serves as a barrier to pedestrians. Although Quintard Street has relatively low traffic volumes and speeds, the corridor intersects major roadways, such as Orange Avenue and Third Avenue. Multiple pedestrian crashes were reported between 2002 and 2007 at the Third Avenue/Quintard Street and Second Avenue/Quintard Street intersections, which are located on either end of Castle Park Middle School. This high priority project scored 14.04 out of a total 18.0 priority points and is ranked 11th out of a total of 30 high priority projects.

#### Improvement Recommendations and Cost Estimate

- Install sidewalk along all segments of the corridor where sidewalk is missing (Project Missing Sidewalk).
- · Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- · Non-project missing sidewalk is outside of the scope of this project and is displayed for informational purposes only.
- Third Avenue/Quintard Avenue: install bulb-outs on the northwest and southwest corners and yellow crosswalks with advance stop lines on all legs.
- Second Avenue/Quintard Street: install bulb-outs on the northeast, southwest, and southeast corners; extend curb into Second Avenue on
  the northwest corner; and install standard crosswalks with advance stop lines.
- First Avenue/Quintard Street: install curb extension into Quintard Street on northwest corner and yellow crosswalks on all legs.

  Cost Estimate: \$436.558

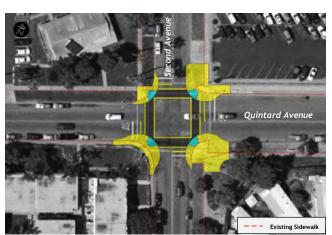
#### Project Extent



Third Avenue/Quintard Avenue Improvements



Second Avenue/Quintard Street Improvements



First Avenue/Quintard Street Improvements



## Project 7: Broadway Corridor: D Street to H Street

#### Description of Area and Issues

This 1.0 mile long high priority corridor along Broadway is characterized by its high levels of commercial activity. Broadway is a four-lane roadway with center turn lanes and on-street parking. It has moderately high average daily traffic volumes and posted speed limits are 35 mph. The corridor is served by the regional MTS bus route 932 and demonstrates moderate transit ridership rates. The combination of significant vehicular traffic, large intersections, and commercial driveways create potential conflicts between pedestrians and vehicles. This high priority project ranked 7th out of a total of 30 high priority projects, scoring 13.96 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- · Non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- . Broadway/Flower Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs.
- . Broadway/E Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs.
- Broadway/F Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs. Cost Estimate: \$76,940

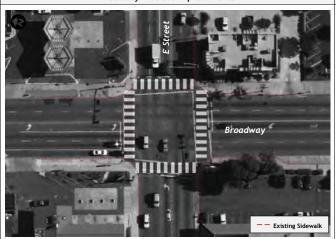
#### Project Extent



#### Broadway/Flower Street Improvements



#### Broadway/E Street Improvements



Broadway/F Street Improvements



## Project 8: Anita Street Corridor: Broadway to Third Avenue

#### Description of Area and Issues

This 0.71 mile high priority project area along Anita Street is predominately residential and the vast majority of residences are mobile homes. Mobile home parks are strongly correlated with high walking rates in Chula Vista. This corridor received several public comments regarding safety concerns via the Pedestrian Master Plan survey. The corridor is served by the local Chula Vista bus route 701 and shows relatively high transit ridership rates for a residential area. Montgomery Elementary School is also located on Fourth Avenue at the corner of Anita Street. This high priority project scored 13.9 out of a total 18.0 priority points and is ranked 8th out of a total of 30 high priority projects.

#### Improvement Recommendations and Cost Estimate

- Install ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp) and where sidewalk improvements are recommended.
- · Non-project missing sidewalk is outside of the scope of this project and is displayed for informational purposes only.
- . Anita Street/Broadway: install sidewalk widening on all four corners; and realign the crosswalk at the southern leg.
- Anita Street/Fourth Avenue: extend curbs on all four corners and install high visibility ladder crosswalks with advance stop lines on all legs of
  this intersection.
- Anita Street/Third Avenue: install sidewalk and a diagonal curb ramp on the southeast corner.

Cost Estimate: \$291,259

#### Project Extent



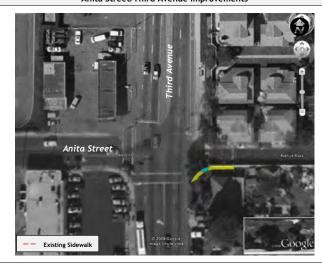
#### Anita Street/Broadway Improvements



#### Anita Street/Fourth Avenue Improvements



#### Anita Street/Third Avenue Improvements



PEDESTRIAN MASTER PLAN 134 June 15, 2010

Project 9: East Orange Avenue Corridor: Max Avenue to I-805

#### Description of Area and Issues

This 0.56 mile high priority project traverses residential land uses along the majority of the corridor, retail uses around the Melrose Avenue/E. Orange Avenue intersection, and terminates at the I-805 ramps. Multiple parks and Rohr Elementary School are also located nearby. The corridor has moderately high average daily traffic volumes that increase to high volumes near the approach of I-805. Freeways present pedestrian safety issues due to the widths of ramps, the speeds of automobiles entering and existing freeways, and lack of lighting where overpasses exist. This high priority project ranked 9th out of a total of 30 high priority projects, scoring 13.89 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- · Non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- Max Avenue /E. Orange Avenue: extend curbs on all four corners; install yellow crosswalks on all four legs; install advance stop lines on the west and east legs; and shortened medians on the west and east legs of this intersection.
- Melrose Avenue/E. Orange Avenue: install standard crosswalks with advance stop lines on all legs of this intersection.

  Cost Estimate: \$195,872

#### Project Extent

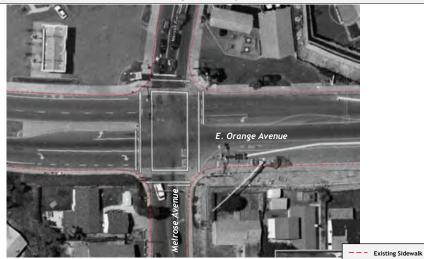


Max Avenue /E. Orange Avenue Improvements

**6** 



Melrose Avenue/E. Orange Avenue Improvements



# Project 10: Third Avenue Corridor: H Street to K Street

#### **Description of Area and Issues**

This 0.75 mile high priority project area along Third Avenue is characterized by its relatively dense mix of office, public service facilities, and some retail. The corridor is served by the regional MTS bus route 929 and has moderate to high transit ridership rates. This corridor attracts a significant number pedestrians and motorists at all times of day and serves as a thoroughfare to downtown. The majority of the corridor is a four-lane roadway with a center turn-lane and on-street parking. Average daily traffic volumes are relatively high and many pedestrian crashes were reported at intersections along this corridor between 2002 and 2007. This high priority project scored 13.88 out of a total 18.0 priority points and is ranked 10th out of a total of 30 high priority projects.

#### Improvement Recommendations and Cost Estimate

- · Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- · Non-project missing sidewalk is outside of the scope of this project and is displayed for informational purposes only.
- I Street/Third Avenue: extend curbs and widen sidewalks at the northwest corner; and install crosswalks and realign stop lines on the north, west and south legs.
- J Street/Third Avenue: extend curbs into J Street on the northeast corner; extend curbs and widen sidewalks into J Street on the southwest corner; and install crosswalks and realign stop lines on the north, west and south legs.
- K Street/Third Avenue: extend curbs into K Street on the northwest, southwest and southeast legs; and install crosswalks and realign stop lines.

Cost Estimate: \$297,000

#### Project Extent



#### I Street/Third Avenue Improvements

#### J Street /Third Avenue Improvements

# Third Avenue/K Street Improvements







# Project 11: Third Avenue Corridor: E Street to H Street

#### **Description of Area and Issues**

This 0.8 mile high priority project area along Third Avenue is characterized by a relatively dense mix of retail and civic facilities, including City of Chula Vista buildings. It also includes several pedestrian-friendly design features such as trees, wide brick sidewalks, mid-block crosswalks with pedestrian actuated signals, benches, and decorative lighting fixtures, most of which are found in the northern half of the corridor. The corridor is served by the regional MTS bus route 929. It attracts a significant number pedestrians and motorists at all times of day and serves as a thoroughfare to downtown. There is parallel parking between E Street and G Street. The entire corridor has large intersections and the majority of the corridor is a four-lane roadway with a center-turn lane. The combination of high vehicular and pedestrian traffic and large intersections create potential conflicts between pedestrians and vehicles. This project overlaps with the Third Avenue Streetscape Project, a project funded by the SANDAG Smart Growth Incentive Program. The Third Avenue Streetscape Project involves enhanced paving treatments, bulbouts, curb ramps, street planting, medians, narrowed travel lanes, bus stops, parking, lighting, street furnishings and sharrows. The Third Avenue Streetscape, Phase I runs along Third Avenue from Madrona Street to H Street. This high priority project scored 13.76 out of a total 18.0 priority points and is ranked 11th out of a total of 30 high priority projects.

#### Improvement Recommendations and Cost Estimate

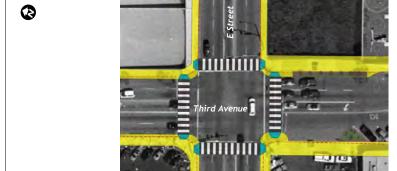
- Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- Third Avenue/E Street: widen sidewalks on the northwest, northeast and southeast corners; extend curbs on the southwest corner; realign
  crosswalks on the north and south intersection legs; and install ladder crosswalks on all legs.
- Third Avenue/F Street: install a bulb-out on northeast corner; install a curb extension into F Street on northwest corner and a curb extension into Third Avenue on southwest corner.

Cost Estimate: \$350,510

#### Project Extent



#### Third Avenue/E Street Improvements



# (2)

Existing Sidewalk



Existing Sidewalk

# Project 12: C Street/Third Avenue Corridor: Fifth Avenue to E Street

#### Description of Area and Issues

This 0.89 mile segment of high priority project along C Street and Third Avenue traverses park space, retail, and mixed residential and commercial areas. The 3-legged Sea Vale intersection at Third Avenue has significant potential for pedestrian-vehicular conflicts because the location lacks a clearly delineated travel path for pedestrians. The width of the intersection is also problematic for pedestrians because it lacks a protected and attractive waiting place for pedestrians attempting to cross through the intersection. Reconfiguring this intersection also presents challenges because vehicular access must be preserved for the residents living on Sea Vale Street. This high priority corridor is a two-lane roadway with intermittent center and right turn lanes from the Fifth Avenue/C Street intersection to the Fourth Avenue/C Street intersection, and a four-lane roadway from the Fourth Avenue/C Street intersection to the end of the corridor extent, just north of the Third Avenue/E Street intersection. This high priority project corridor scored 13.72 out of a total 18.0 priority points and is ranked 12th out of a total of 30 high priority projects.

#### Improvement Recommendations and Cost Estimate

- Install sidewalk along all segments of the corridor where sidewalk is missing (Project Missing Sidewalk).
- Install ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp) and where sidewalk improvements are recommended.
- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes
  only.
- Third Avenue/Sea Vale Street: install landscaped island with sidewalk traversing the island, ladder crosswalks and curb ramps; the landscaped island
  recommended for the southern point of the intersection is intended to slow vehicles turning onto Sea Vale Street by forcing them to take a hard right
  turn north of the island rather than merging freely onto Sea Vale Street.
- Third Avenue/D Street: extend curb and widen sidewalk into Third Avenue along the northwest, southwest, southeast intersection legs; install a bulbout on the northeast corner; install standard crosswalks on all legs, including realignment along the south leg; and install a raised median on the northern
  leg.

Cost Estimate: \$552,759



# Project 13: Broadway Corridor: Moss Street to Main Street

#### Description of Area and Issues

This 1.38 mile high priority project along Broadway has a mix of office, retail, and other commercial land uses. The majority of the corridor is a 4-lane roadway with a center turn lane and on-street parking. Broadway has high average daily traffic volumes between Moss Street and Orange Avenue and moderate traffic volumes from Orange Avenue to Main Street. The corridor is served by the regional MTS bus route 932 which links Broadway to the Palomar Transit Center via the local bus route 701. The combination of significant vehicular traffic, large intersections, and commercial driveways create potential conflicts between pedestrians and vehicles. This high priority project ranked 13th out of a total of 30 high priority projects, scoring 13.63 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

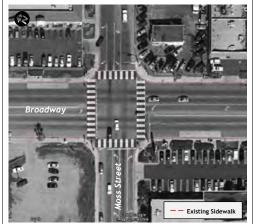
- . Install sidewalk along the segment of the corridor where sidewalk is missing (Project Missing Sidewalk).
- . Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- . Broadway/Moss Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs.
- Broadway/Naples Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs.
- Broadway/Oxford Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs.
- Broadway/Palomar Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs.

Cost Estimate: \$136,051

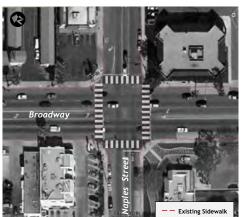
#### Project Extent



#### Broadway/Moss Street Improvements



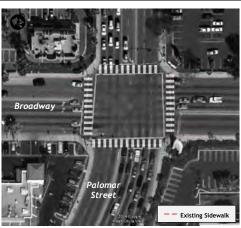
Broadway/Naples Street Improvements



Broadway/Oxford Street Improvements



Broadway/Palomar Street Improvements



# Project 14: G Street Corridor: Broadway to Third Avenue

#### Description of Area and Issues

# This 0.75 mile high priority project along Third Avenue traverses residential and commercial areas, and community destinations, such as Vista Square Elementary and Chula Vista Middle School. The regional MTS bus route 929 runs along Broadway at the corridor's western terminus and the regional MTS 929 runs along Third Avenue at the corridor's eastern terminus. The area intersects major roads with multiple turn lanes. Three of these intersections, the Broadway/G Street intersection, Fourth Avenue/G Street intersection, and Third Avenue/G Street intersection, have seen between four and seven pedestrian crashes each between 2002 and 2007. This corridor also received several public comments regarding safety via the Pedestrian Master Plan survey. This high priority project ranked 14th out of a total 18.0 priority projects, scoring 13.49 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- · Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- · Non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- Broadway/G Street: install ladder crosswalks and pedestrian countdown signals on all intersections legs; restripe traffic lanes; extend curbs
  into G Street on all four corners; and widen sidewalks on the northeast and southwest corners.
- Fourth Avenue/G Street: extend curbs into G Street on all four corners; and realign crosswalks and add advance stop lines on all intersection legs.

Cost Estimate: \$465,680

#### Project Extent



6

Existing Sidewalk

#### Broadway/G Street Improvements



#### Fourth Avenue/G Street Improvements



— — Existing Sidewalk

# Project 15: H Street Corridor: I-5 to Second Avenue

#### Description of Area and Issues

This 1.4 mile high priority project along H Street is one of the most active stretches of roadway in Chula Vista. H Street is a four-lane roadway with some of the highest average daily traffic volumes in the city. The corridor runs through one of the densest employment areas in the city. Major attractions along this corridor include the Chula Vista shopping center, Scripps-Mercy Hospital and the H Street Transit Center. The corridor includes large intersections with multiple turn lanes. At the western end of the project area are railroad tracks and a freeway interchange. The combination of pedestrian attracting land uses, major transit activity, significant vehicular traffic and large intersections create potential pedestrian-automobile conflicts. This high priority project ranked 15th out of a total of 30 high priority projects, scoring 13.33 out of a total 18.0

#### Improvement Recommendations and Cost Estimate

- · Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- · Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational
- Woodlawn Avenue/H Street: add crosswalks on the west, east, and south legs.
- Broadway/H Street: install ladder crosswalks and pedestrian countdown signals on all four corners.
- Fifth Avenue/H Street: extend curb and widen sidewalk on the southwest corner; restripe the crosswalks and stop lines on the north and east corner; realign the crosswalks on the west and south legs.
- Fourth Avenue/H Street: extend curb and widen sidewalk on the southwest leg of Fourth Avenue; realign the crosswalk and stop line. Cost Estimate: \$156,470

#### Project Extent

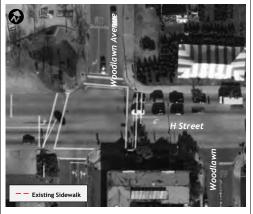


Woodlawn Avenue/H Street Improvements

**Broadway/H Street Improvements** 

Fifth Avenue/H Street Improvements

Fourth Avenue/H Street Improvements









# Project 16: Fourth Avenue Corridor: SR-54 to H Street

#### Description of Area and Issues

This 1.5 mile segment of high priority project along Fourth Avenue includes a mixture of low and medium density residential areas. At the northern end of the corridor is a big-box shopping center, at the southern end are several civic facilities, including the Civic Center complex, Chula Vista Police Department headquarters and Friendship Park. This corridor is a four-lane roadway with a narrow striped median. There are many large intersections with dedicated turn lanes. The segment has medium to high average daily traffic volumes and a posted speed limit of 35 mph. While commercial activity is not as high as comparable arterial corridors in the City, the several civic destinations draw significant pedestrian activity. This high priority project ranked 16th out of a total of 30 high priority projects, scoring 13.20 out of a total 18.0 priority points.

Note: It is possible that the curb extension recommended for the northeast corner of the Fourth Avenue/Brisbane Street intersection could impact truck turn movements.

#### Improvement Recommendations and Cost Estimate

- · Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational
  purposes only.
- Fourth Avenue/Brisbane Street: extend curb on the northeast corner; widen sidewalk along the north side of Brisbane Street east of the
  intersection; realign crosswalk on the west and east legs; and install a new crosswalk on the north leg.
- . Fourth Avenue/C Street: realign crosswalks with stop lines on all legs.
- Fourth Avenue/E Street: extend curb and widen sidewalk on the northeast corner; and realign crosswalk on the west and east legs. Cost Estimate: \$127,925

#### **Project Extent**



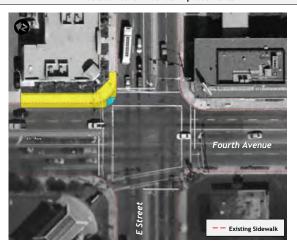
Brisbane Street/Fourth Avenue Improvements



C Street/Fourth Avenue Improvements



E Street/Fourth Avenue Improvements



# Project 17: Fifth Avenue Corridor: F Street to H Street

#### Description of Area and Issues

#### Improvement Recommendations and Cost Estimate

This 0.5 mile segment of high priority project along Fifth Avenue passes between two schools: Chula Vista Middle School and Vista Square Elementary. This 2-lane segment of Fifth Avenue provides a link between two major east-west roads. Daily traffic volumes are moderate and the posted speed limit is 30 mph. This high priority project ranked 17th out of a total of 30 high priority projects, scoring 13.19 out of a total 18.0 priority points.

- Non-project missing sidewalk is outside of the scope of this project and is displayed for informational purposes only.

  The description of the scope of this project and is displayed for informational purposes only.
- Fifth Avenue/F Street: install high visibility yellow crosswalks with advance stop line bars on all legs of this intersection.
- Fifth Avenue/G Street: install high visibility yellow crosswalks on all legs of this intersection.

Cost Estimate: \$28,100

#### Project Extent

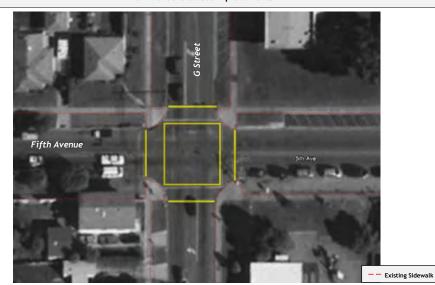


**6** 

Fifth Avenue/F Street Improvements

Fifth Avenue/G Street Improvements





# Project 18: Oxford Street Corridor: Broadway to Second Avenue

#### **Description of Area and Issues**

This one mile high priority project along Oxford Street is primarily single-family and multi-family residential. The corridor is a two-lane collector roadway with moderate daily traffic volumes. Lauderbach Park is located at the eastern end of the corridor. The western portion of the corridor is characterized by multi-family residential and a big-box shopping complex at the intersection of Broadway and Oxford Street. The corridor has high average daily traffic volumes and a posted speed limit of 30 mph. The City already has fully funded construction plans to improve the pavement, install sidewalk, curb ramps, and driveway aprons along Oxford Street from Third Avenue to Alpine Avenue. Therefore, improvements between Third Avenue and Second Avenue are not included in the scope and cost of this project. This high priority project ranked 18th out of a total of 30 high priority projects, scoring 13.09 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational
  purposes only.
- · Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- Fifth Avenue/Oxford Street: install curb extensions into Fifth Avenue on all four corners; and realign crosswalks on the west, east and south intersection legs.

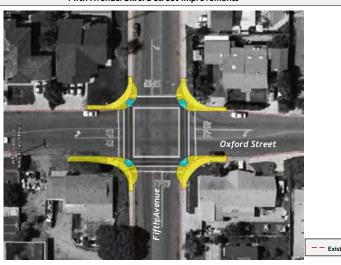
Cost Estimate: \$269,619

#### Project Extent



#### Fifth Avenue/Oxford Street Improvements





- Existing Sidewalk

# Project 19: Broadway Corridor: H Street to Moss Street

#### Description of Area and Issues

This 1.25 mile high priority project along Broadway is one of the most active stretches of roadway in western Chula Vista. The corridor is lined with retail and residences. Broadway is a high volume transit corridor with daily ridership rates in the thousands. Broadway is a four-lane arterial with high average daily traffic volumes. The corridor features several large intersections with potential points of conflicts for vehicle and pedestrians. The Broadway/H Street intersection had one of the greatest numbers of pedestrian-involved crashes in the City between 2002 and 2007. The combination of pedestrian attracting land uses, significant vehicular traffic and large intersections create potential conflicts between pedestrians and vehicles. This high priority project ranked 19th out of a total of 30 high priority projects, scoring 12.80 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational
  purposes only.
- Broadway/I Street: install ladder crosswalks and pedestrian countdown signals on all four corners.
- Broadway/J Street: install ladder crosswalks and pedestrian countdown signals on all four corners.
- Broadway/K Street: install ladder crosswalks and pedestrian countdown signals on all four corners.
- . Broadway/L Street: install ladder crosswalks and pedestrian countdown signals on all four corners.

Cost Estimate: \$95,420

#### **Project Extent**



Broadway/I Street Improvements

Broadway/J Street Improvements

Broadway/K Street Improvements

Broadway/L Street Improvements









# Project 20: E Street Corridor: I-5 to Third Avenue

#### Description of Area and Issues

This 1.1 mile high priority project along E Street traverses through the most densely populated part of Chula Vista. The area's population characteristics include high percentages of youth and elderly, which are strongly correlated with walking rates. E Street is a four lane arterial. At the far western end of the project area is a major transit station and an I-5 freeway interchange. Average daily traffic volumes along this 35 mph arterial road are relatively high for western Chula Vista. This high priority project ranked 20th out of a total 18.0 priority projects, scoring 12.75 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- Woodlawn Avenue/E Street: extend the curb into Woodlawn Avenue on the southwest corner; realign crosswalk on the south and east legs; and stripe a new crosswalk on the west leg.
- Landis Avenue/E Street: install bulb-outs on all four corners; and stripe crosswalks on the north and south legs.

Cost Estimate: \$193,925

#### **Project Extent**



Woodlawn Avenue/E Street Improvements



Landis Avenue/E Street Improvements



# Project 21: Moss Street Corridor: Industrial Boulevard to 3<sup>rd</sup> Avenue

#### Description of Area and Issues

# Improvement Recommendations and Cost Estimate

This 1.13 mile high priority project begins at the Industrial Boulevard/Moss Street intersection in the west and terminates at the intersection of Third Avenue/Moss Street in the east. Land uses along the corridor include single and multi-family housing, retail, Options Secondary School, and industrial uses around Industrial Boulevard. Moss Street is a two-lane roadway with low to moderate daily traffic volumes and a posted speed limit of 30 mph between Industrial Boulevard and Broadway and 35 mph between Broadway and Third Avenue. This high priority project ranked 21st out of a total of 30 high priority projects, scoring 12.38 out of a total 18.0 priority points.

 Install sidewalk along all segments of the corridor where sidewalk is missing (Project Missing Sidewalk) and ADA compliant curb ramps at all intersections where missing (Project Missing Curb Ramp).

 Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.

Cost Estimate: \$486,016

#### Project Extent



# Project 22: Fourth Avenue Corridor: H Street to Moss Street

#### Description of Area and Issues

This 1.25 mile high priority project along Fourth Avenue is predominantly residential. Chula Vista High School is located on the northwest corner of Fourth Avenue and L Street. Rice Elementary School is located on the southeast corner of Fourth Avenue and L Street. The corridor is served by the regional MTS bus route 704 and has moderate transit ridership rates all along this corridor. Fourth Avenue is a four-lane road and includes multiple large intersections with multiple turn lanes. The segment has moderate to high average daily traffic volumes and posted speed limits are 35 mph. The combination of pedestrian attracting land uses, significant vehicular traffic and large intersections create potential conflicts between pedestrians and vehicles. The City has fully funded plans to construct pavement improvements, curb/gutter and sidewalk, curb ramps and driveway aprons along the west side of Fourth Avenue. The cost for these improvements are not incorporated into the costs of this high priority project. This high priority project ranked 22nd out of a total of 30 high priority projects, scoring 12.24 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- · Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational
- · Fourth Avenue/K Street: extend curbs into K Street on the northeast and southwest corners; realign crosswalks on the north, south and east legs; add stop lines on all legs; and re-stripe the west and east legs for 12' turn lanes and 14' through lanes.
- Fourth Avenue/Moss Street: install bulb-outs and realign crosswalks on all four corners.

Cost Estimate: \$237,980

#### Project Extent

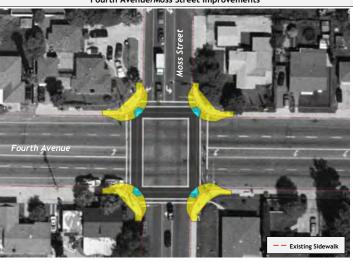


#### Fourth Avenue/K Street Improvements

(2)



#### Fourth Avenue/Moss Street Improvements



# Project 23: I Street Corridor: Fourth Avenue to Del Mar Avenue

#### **Description of Area and Issues**

This 0.5 mile high priority project along I Street starts at Fourth Avenue in the west and terminates at Second Avenue in the east. The corridor intersects two north-south high priority project corridors at Third Avenue and Fourth Avenue. Land uses along this corridor include retail, office and commercial uses, as well as residential along the majority of the south side. This 2-lane roadway includes on-street parking along the majority of its extent. Three major transit lines intersect the corridor, the local Chula Vista Route 704, Route 701 and Regional MTS Route 929. The mix of residential with pedestrian attracting land uses, such as commercial, office, and retail space along with transit access, provides opportunities to increase pedestrian activity by making pedestrian improvements. This high priority project corridor scored 12.24 out of a total 18.0 priority points and is ranked 23<sup>rd</sup> out of a total of 30 high priority projects.

#### Improvement Recommendations and Cost Estimate

- Install ADA compliant curb ramps at all intersections where sidewalk improvements are recommended.
- Fourth Avenue/I Street: install bulb-outs on all four corners to shorten pedestrian crossing distances and reduce turning vehicle speeds; realign crosswalk on the north, south and east legs of this intersection.
- Third Avenue/I Street: extend curb and widen sidewalk into I Street on the northwest intersection leg; and install ladder crosswalks with advance stop line bars on all legs of the intersection.
- Del Mar Avenue/I Street: install perpendicular curb ramps on the northwest and northeast corners of the intersection to align with the northward facing ramps on the southwest and southeast corners; install larger concrete landings on the northern corners.

Cost Estimate: \$269,000

#### Project Extent



Fourth Avenue/I Street Improvements



Third Avenue/I Street Improvements



Del Mar Avenue/I Street Improvements



Souræ: Alta Planning + Design, October 2009

# Project 24: Naples Street Corridor: Industrial Boulevard to Hilltop Drive

#### Description of Area and Issues

This 1.88 mile high priority project along Naples Street passes by Harborside Elementary School, multiple retail and commercial areas including the Price Club Plaza, and recreational destinations, such as the San Diego Country Club Golf Course. The corridor is partially served by the regional MTS bus route 704 and has moderate transit ridership rates all along the corridor. Naples Street is a two-lane road that includes intersections with multiple turn lanes. The segment has low to moderate average daily traffic volumes and posted speed limits range from 35 mph to and 25 mph. The area is additionally challenging for pedestrian connectivity because the corridor includes segments of missing sidewalk and it also intersects with multiple roadways with missing sidewalk. The City has fully funded plans to make pavement and drainage improvements and install curb/gutter, sidewalk, curb ramps and driveway aprons along Naples Street from Third Avenue to Alpine Avenue. These improvements have been recently completed on the south side of Naples Street from Alpine Avenue to west of Hilltop Drive. This high priority project ranked 24th out of a total of 30 high priority projects, scoring 12.24 out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- · Install sidewalk along all segments of the corridor where sidewalk is missing or unfunded (Project Missing Sidewalk).
- · Install ADA compliant curb ramps at all intersections where missing sidewalk improvements are recommended.
- Non-project missing sidewalk and non-project missing curb ramps are outside of the scope of this project and are displayed for informational purposes only.
- Fifth Avenue/Naples Street: realign crosswalks with stop lines on all four legs of this intersection.
- First Avenue/Moss Street/Naples Street: install a standard crosswalk on north leg with advance stop line; improvements to this intersection
  also include installing missing sidewalks and curb ramps.
- Hilltop Drive/Naples Street: install bulb-outs on the northeast, southwest, and southeast corners with diagonal curb ramps; extend curbs and
  widen sidewalks into Naples Street on northwest corner; and realign crosswalks and stop lines on all four legs of this intersection.

Cost Estimate: \$854,280

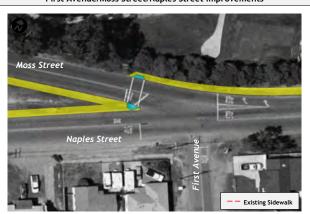
#### **Project Extent**



#### Fifth Avenue/Naples Street Improvements



First Avenue/Moss Street/Naples Street Improvements



Hilltop Drive/Naples Street Improvements



# Project 25: L Street Corridor: Industrial Boulevard to Fifth Avenue

# Start | See Project III | See

#### Fifth Avenue/L Street Improvements



#### Description of Area and Issues

This 0.63 mile high priority project starts at the Industrial Boulevard/L Street intersection, located directly west of the I-5 ramps, and terminates to the east of the Fifth Avenue/L Street intersection. The corridor intersects two north-south high priority project corridors at Industrial Boulevard and Broadway. The land uses along the L Street Corridor include office and commercial uses, as well as residential and schools along the eastern portion of the corridor. Chula Vista High School campus covers the L Street block between Fifth Avenue and Fourth Avenue. Rice Elementary School is also located near the eastern terminus of the project corridor, at the Fourth Avenue/L Street intersection. This corridor is a 4-lane roadway over the entire project extent with moderate to high average daily traffic volumes and multiple large intersections, such as the Broadway/L Street intersection and Industrial Boulevard/L Street intersection. The combination of significant pedestrian barriers and pedestrian attracting land uses, such as schools, commercial and offices, requires improvements to reduce the potential for pedestrian-vehicular conflicts. This high priority project ranked 25th out of a total 18.0 priority project ranked 25th out of a total 18.0 priority points.

#### Improvement Recommendations and Cost Estimate

- Install sidewalk along the segment of the corridor where sidewalk is missing (Project Missing Sidewalk) and install ADA compliant curb ramps where missing (Project Missing Curb Ramp).
- Non-project missing sidewalk is outside of the scope of this project and is displayed for informational purposes only.
- Fifth Avenue/L Street: install yellow ladder crosswalk on all intersection legs; install standard
  Fluorescent Yellow-Green (FYG) school zone signage and pavement markings along the L Street
  approaches.

Cost Estimate: \$84,324

# Project 26: J Street Corridor: Fourth Avenue to Second Avenue

#### **Description of Area and Issues**

and is ranked 26th out of a total of 30 high priority projects.

# This 0.5 mile high priority project along J Street runs from Fourth Avenue in the west to Second Avenue in the east. With the exception of the two grocery stores along J Street between Garrett Avenue and Third Avenue, the area is entirely residential. The corridor is a two-lane roadway with moderate to low average daily traffic volumes and a posted speed limit of 30 mph. Despite relatively mild pedestrian conditions, the Third Avenue/J Street intersection is one of the highest pedestrian crash locations in the City according to 2002 – 2007 data. Project 2 describes recommended improvements to the Third Avenue/J Street intersection. This high priority project scored 11.24 out of a total 18.0 priority points

#### Improvement Recommendations and Cost Estimate

- Fourth Avenue/J Street: re-stripe standard crosswalks with stop lines on all intersection legs.
- Second Avenue/J Street: re-stripe standard crosswalks with stop lines on all intersection legs.
   Cost Estimate: \$28,100

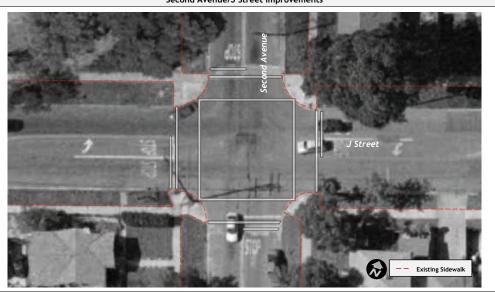
#### Project Extent



Fourth Avenue/J Street Improvements



Second Avenue/J Street Improvements



# Project 27: K Street Corridor: Fourth Avenue to Second Avenue

#### Description of Area and Issues

#### Improvement Recommendations and Cost Estimate

This 0.5 mile high priority project along K Street extends from Second Avenue to Fourth Avenue. Chula Vista High School is located on the southwestern corner of the Fourth Avenue/K Street intersection and commercial activity surrounds the Third Avenue/K Street intersection. The remainder of the corridor is single- and multi-family residential. K Street is a two-lane roadway with low to moderate daily average daily traffic volumes and posted speed limits are 30 mph. A relatively high number of pedestrian crashes was reported between 2002 and 2004 at the Fourth Avenue/K Street and Third Avenue/K Street intersections. This high priority project corridor scored 10.76 out of a total 18.0 priority points and is ranked 27th out of a total of 30 high priority projects.

Second Avenue/K Street: install standard crosswalks with stop lines on all intersection legs.
 Cost Estimate: \$24,800

#### Project Extent



#### Second Avenue/K Street Improvements





Existing Sidewal

# Project 28: Paseo Ranchero/Heritage Road and Telegraph Canyon Road

# This high priority project is located at the Paseo Ranchero/Heritage Road and Telegraph Canyon Road intersection in eastern Chula Vista. The intersection is devoid of any land uses though it is a ½ mile south of two grade schools, Casillas Elementary and Rancho del Rey Middle School. Pedestrian pathways from the residential cul-de-sacs to the south of Telegraph Canyon Road provide good access to the intersection. Paseo Ranchero/Heritage Road and Telegraph Canyon Road are exceptionally large roadways, with multiple travel lanes and multiple dedicated turn lanes. Telegraph Canyon Road has high average daily traffic volumes and posted speed limit of 50 mph. Two pedestrian crashes were reported at this location between 2002 and 2007. The combination of high traffic speeds, high volumes and two schools, indicates that pedestrian improvements would enhance pedestrian comfort and reduce the potential for pedestrian-vehicular conflicts. This high priority project is ranked 28th out of a total

of 30 high priority projects.

Description of Area and Issues

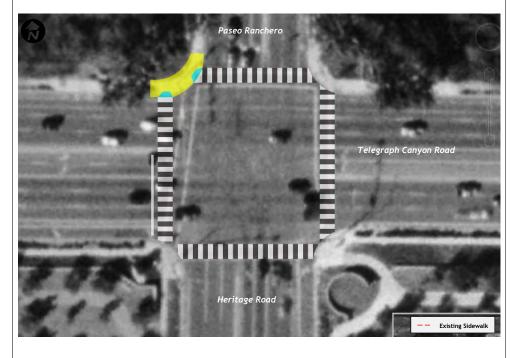
#### Improvement Recommendations and Cost Estimate

- · Install high visibility ladder crosswalks and pedestrian countdown signals on all intersections legs.
- · Realign stop line to accommodate straightening of western leg of crosswalk.
- · Install perpendicular curb ramps on the northwest corner where missing.

Cost Estimate: \$38,990

Project Extent Intersection Improvements





# Project 29: Otay Lakes Road/Bonita Road Intersection

#### This high priority project is located at the Otay Lakes Road/Bonita Road intersection in northeastern Chula Vista. The Chula Vista Golf Course is located immediately north of the intersection, retail is located on the southwest and southeast corners of the intersection. Otay Lakes Road and Bonita Road are large roadways, with multiple travel lanes and multiple dedicated turn lanes. Through this area Otay Lakes Road has very high average daily traffic volumes and a 40 mph posted speed limit. Bonita Road also has high to medium average daily traffic volumes and a 35 mph

Description of Area and Issues

#### . Reconstruct raised median on the south leg; realign crosswalk on the south leg to shorten the crossing area; add a stop line on the south leg; and install dashed pavement markings through the intersection to clarify left- and right-turn movements from the south to the west and east legs. Cost Estimate: \$41,795

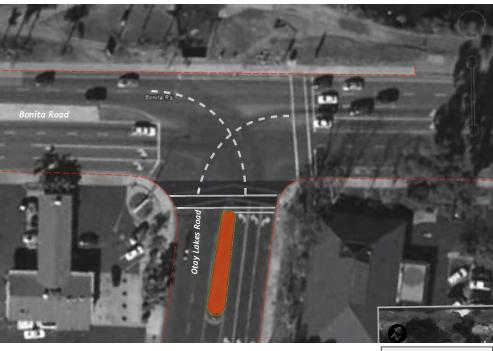
Improvement Recommendations and Cost Estimate

#### Project Extent

posted speed limit through this intersection. This high priority project intersection is ranked 29th out of a total of 30 high priority projects.

# Intersection Improvements





Raised Median

# Project 30: Medical Center Drive/Telegraph Canyon Road Intersection

#### Description of Area and Issues

#### Improvement Recommendations and Cost Estimate

This high priority project is located at the Medical Center Drive/Telegraph Canyon Road intersection in eastern Chula Vista. Immediately north of the intersection is a large area of green space. Sharp Chula Vista Medical Center, Veteran's Home of Chula Vista, Sunbow Park and Greg Rogers Park are all located in the area south of the intersection. Medical Center Drive and Telegraph Canyon Road are exceptionally large roadways, with multiple travel lanes and dedicated turn lanes. Medical Center Drive has moderate average daily traffic volumes and 35 mph posted speed limits. Telegraph Canyon Road has very high average daily traffic volumes and 50 mph posted speed limits through this intersection. Pedestrian improvements would ameliorate pedestrian comfort and reduce the potential for pedestrian-vehicular conflicts in this location with high traffic speeds and volumes. This high priority project intersection is ranked 30th out of a total of 30 high priority projects.

Install high visibility ladder crosswalks across the south and east intersection legs; install a stop line on the west leg and dashed pavement
markings through the intersection to clarify left-turn movements from the south to the western leg.

Cost Estimate: \$27,440

Project Extent Intersection Improvements



